Adam Smallhorn

Contact details are redacted from this online resume.
Please use contact form on website to get in touch with me or use linkedIn
http://www.linkedin.com/in/adamsmallhorn

EDUCATION

Bachelor of Engineering (Computer)   Expected Nov 2017
University of New South Wales

- *Tutor / TA*: Security Engineering (2017)
- *Distinguished Marks*: Security Engineering (97% - High Distinction), FPGA Design Project B (88% - High Distinction), Operating Systems (Distinction), Advanced C++ (Distinction), Networking (Distinction), Human Computer Interaction (High Distinction)

Higher School Certificate   2009
St Ignatius' College, Riverview
- ATAR: 94.35 | Vice-Captain of the College | Captain of Public Speaking and Debating
- Recipient of the 'Insignis' College Medal – the highest honour awarded

EMPLOYMENT HISTORY

Web Developer/Designer   2011 – Present
Freelance
- Worked with 9+ Small business & non-profit clients and managed the whole process
- Skills: PHP, JS, CSS, HTML, Source Control (Git), Linux server administration, UX design, E-Commerce, SEO optimisation

IT & Web (Development) Manager   2011-2014
Christophe Living, Woollahra
- Lead ambitious project to convert business to luxury online retail experience with a 12-month e-commerce website development project which now results in 6000 visits/month.
- Responsibilities included: development, design, server admin, data manipulation, managing a team of 1-2 developers, liaising with content writers and marketing. Technologies: LESS, CSS, PHP, Git, E-Commerce, LAMP Stack
- Undertook a data manipulation project including scrapping & sanitisation of over 2000 products from 8 different sources to present a consistent product dataset for the website

PERSONAL PROJECTS

Regression model module for Splunk Dashboard   Feb 2017
Accenture Bootcamp
- Built a custom command line tool within Splunk to interface with Python to perform regression analysis using: Linux, Python, Splunk API

Fake Diffusible Countdown Bomb *(link)*   Jul – Dec 2016
- Built 10 x 'countdown' bombs in C,for using Arduino microcontrollers for leadership program
- Skills: C, Protothreads, I2C interfacing, polling and embedded system memory management.

Investigation and discovery of Flickr leaking users' location data *(link)*   Jul 2016
- Investigated a range of social media platforms to see whether they maintain personal data
- Discovered that Flickr keeps user GPS latitude and longitude in the EXIF data and conducted tests to verify the accuracy of the leaked data

Carols on the Common Website Development *(link)*   2015
- Development of new website focusing on modern & responsive design using: Bootstrap, PHP, Git, CSS

UNIVERSITY PROJECTS

Novel Approach to Privacy Preservation in the Internet of Things using Blockchain
R&D Thesis   Mar 2017- Present
- Implementing a secure blockchain-based network to allow users to control their personal data, while preserving anonymity, adding robustness and minimising the risk of a centralised data breach
- Currently developing a custom IOT device using and a local device to interface with the blockchain network using C++

Particle filter for object tracking using OpenCV and custom FPGA hardware *(link)*   Jul 2016
- Aimed to speed up object tracking using a particle filter by building custom FPGA hardware
- Designed hardware circuits for matrix multiplication and score calculation in VHDL
- Achieved a 100% speed increase, and received a High Distinction for my work

OTHER EMPLOYMENT

Computer Trainer & Tech Support   2011 – Present
Freelance
- Rapidly diagnosing technical issues with technology and computers on the spot through on-site tech support for small businesses
- Teaching retirees how to use iPads, Windows PCs & Macs

Gap Student   2010
Belvedere College SJ, Dublin
- Initiated a 4-month FileMaker Pro database project to make data entry of results more intuitive and less time consuming after witnessing the inefficient previous approach
- Graphic design of two 16-page booklets for new parents of the school

EXTRACURRICULAR ACTIVITIES

BSides Canberra Security Conference (Mar 2017)

Accenture Hackathon (Feb 2017) - Built a custom command line tool within Splunk to interface with Python to perform regression analysis using: Linux, Python, Splunk API

StartCon (Nov 2016), YOW! Conference (Nov 2016, Mar 2017) : Volunteer

Rotary Youth Leadership (2014-Present): Facilitator and 2IC for annual 7-day leadership program with over 80 attendees.

Rotary Carols on the Common (2015-Present): Social Media & Marketing, developed new responsive website, achieved 39% increase in 'likes', designed 19-page sponsorship proposal used to secure over $20k in donations. Developed press releases, and executed marketing campaigns for sponsors

Ignatian Children's Holiday Camp (2011-Present) – Ex-Companion volunteer, mentoring and caring for children with disabilities for a week during the Christmas holidays

Young Scientists of Australia (2014-2011) –Worked as President (2yr), Comms director, Secretary for non-profit with over 200 members. Lead two committees, developed new website & database, increased membership by 80%, quadrupled the number of events, and tripled cash in bank.

LANGUAGES & SKILLS
- **Languages**: C (5 yrs), Java (4 yrs), C++ (2 yrs), Python (1 yr), VHDL (3 yrs), PHP (3 yrs), CSS (5yrs), HTML (5 yrs), JS (1yr)
- **Skills**: Photoshop, In Design, Lightroom, Photography, Intermediate Italian

Referees available upon request.